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NONFARM AGRICULTURAL EMPLOYMENT IN NORTHWEST LOUISIANA--AREA
I--WITH IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS.

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LOUISIANA ST. UNIV., BATON ROUGE

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OPPORTUNITIES, *EDUCATIONAL NEEDS, *OCCUPATIONAL SURVEYS,
*EMPLOYMENT QUALIFICATIONS, AGRICULTURAL SKILLS, OCCUPATIONAL
CLUSTERS, LOUISIANA,

AS PART OF A STATEWIDE STUDY OF AGRICULTURAL OCCUPATIONS
IN LOUISIANA, AN INTERVIEW SURVEY OF 233 AGRICULTURAL
BUSINESSES AND AGENCIES IN THE 10-PARISH AREA IN THE
NORTHWESTERN SECTION WAS CONDUCTED TO (1) IDENTIFY AND
CLASSIFY FIRMS WITH EMPLOYEES NEEDING AGRICULTURAL
COMPETENCIES, (2) IDENTIFY AGRICULTURAL COMPETENCIES NEEDED
FOR ENTRY AND ADVANCEMENT, AND (3) IDENTIFY CHARACTERISTICS
OF ALL JOB TITLES. THE FIRMS EMPLOYED 4,847 WORKERS OF WHICH
2,451 IN 438 JOB TITLES NEEDED AGRICULTURAL COMPETENCIES. AN
ESTIMATED 170 ADDITIONAL EMPLOYEES WILL BE NEEDED WITHIN 5
YEARS. EMPLOYEES WERE FOUND IN EIGHT OCCUPATIONAL FAMILIES
AND NINE EMPLOYMENT LEVELS. OVER 78 PERCENT OF THE JOB TITLES
WERE FOUND IN THE OCCUPATIONAL FAMILIES--(1) FARM SUPPLIES
AND EQUIPMENT, (2) LIVESTOCK AND POULTRY, (3) CROPS,
FORESTRY, AND SOIL CONSERVATION, AND (4) FARM SERVICE. THE
MEAN MINIMUM AGE FOR JOB ENTRY WAS 22. EMPLOYERS WANTED
EMPLOYEES WITH AT LEAST A HIGH SCHOOL EDUCATION, AND MORE
THAN 18 PERCENT PREFERRED SOME COLLEGE TRAINING. A FARM
BACKGROUND WAS PREFERRED IN 64 PERCENT OF THE JOBS. THE
PROFESSIONAL, MANAGERIAL, SUPERVISORY, AND SALES EMPLOYMENT
LEVELS GENERALLY REQUIRED BROAD AGRICULTURAL TRAINING WITH
CONCENTRATION IN A SPECIFIC AREA. ON-THE-JOB TRAINING AND
INDUSTRY SCHOOLS WERE THE MOST COMMON MEANS OF SUPPLYING
CONTINUING EDUCATION. THE SURVEY INSTRUMENT, A LIST OF TOWNS
AND BUSINESSES SURVEYED, AND A LIST OF WORKERS IN EACH ARE
INCLUDED. OTHER AREA SURVEYS AND RELATED STUDIES ARE
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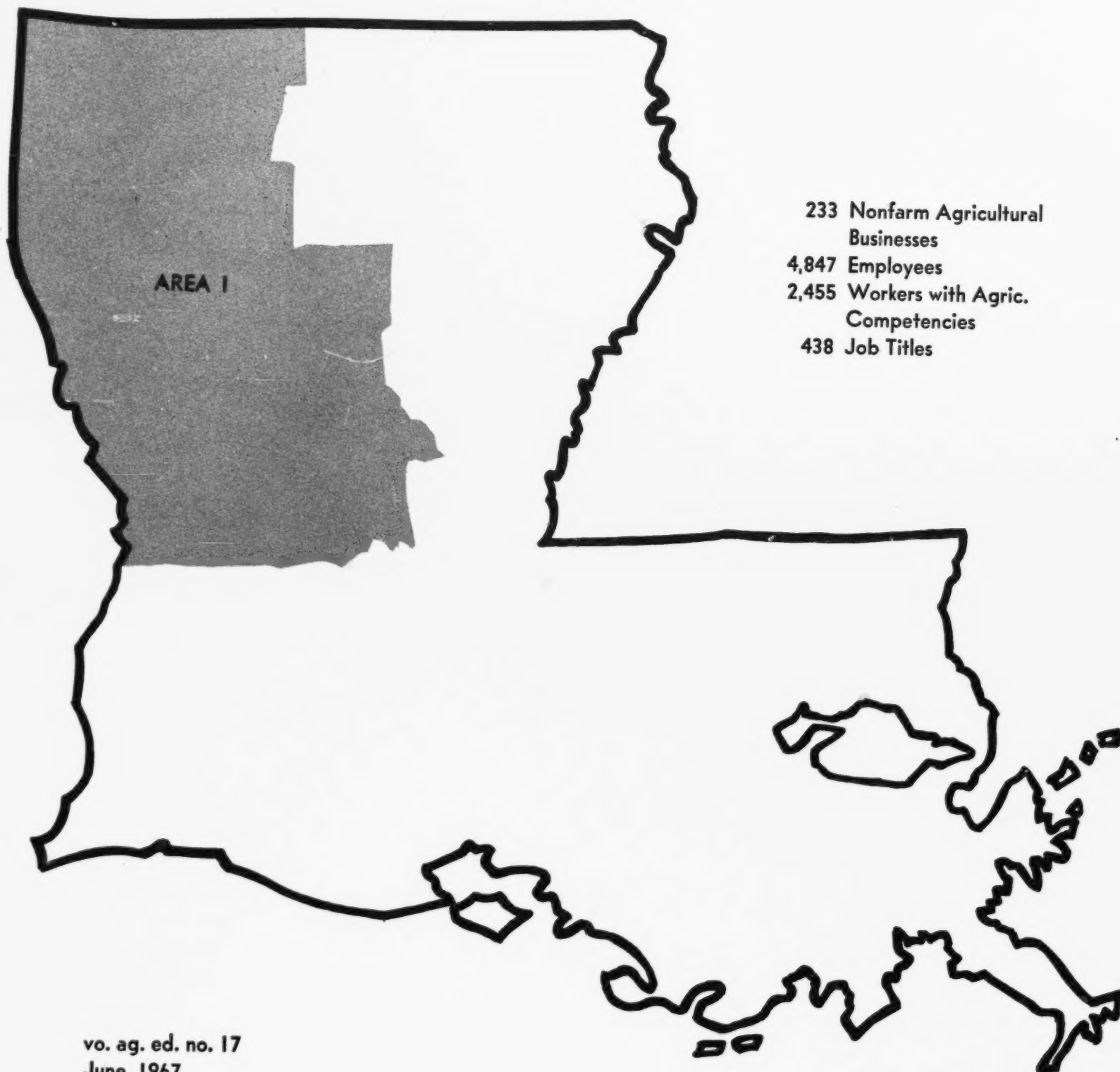
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Loy H. Dobbins

DEPARTMENT OF VOCATIONAL AGRICULTURAL EDUCATION

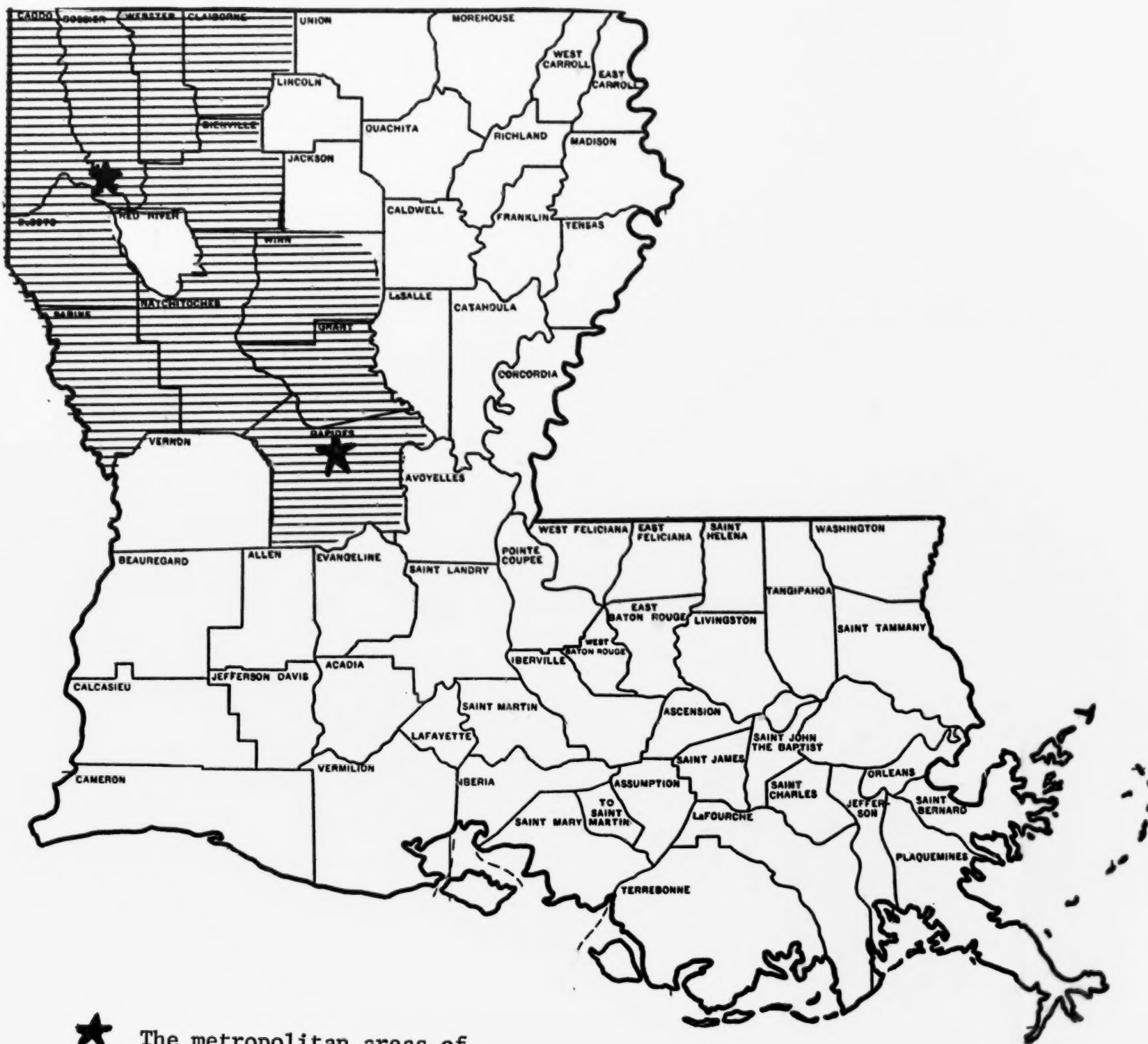
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★ The metropolitan areas of Shreveport and Alexandria are excluded in this study

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NONFARM AGRICULTURAL EMPLOYMENT IN NORTHWEST
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INTRODUCTION

The welfare of the American citizen becomes more closely associated with an occupation as the national economy moves from a rural to an urban society. Occupations not only grow more complex and greater in number, but they consistently require more qualifications of the prospective worker. Youth possessing appreciable education and vocational training are highly employable. Those less fortunate in formal education are more likely to obtain lesser paying jobs, or even fail to find satisfactory employment.

Today, in education the payoff to the individual is a realistic job. Moreover, the individual worker is identified with the kind of work performed which, as a fact of modern day living, tends to establish level of living and social contribution.

Educators in planning occupational training programs must first consider the aspirations and capabilities of students, and they must also be guided by the labor market, taking into account fields of employment in which there are consistent opportunities for employment.

Traditionally, the broad field of agriculture has absorbed youth in great numbers, particularly those having a rural background. Early in the life of the country the land was its prime resource, with most people living off its bounties. Farming commenced as a way of life, reaching commercial

status only after farmers could produce a surplus over family living to sell to others who were engaged in off-farm occupations.

With the growth of the country, more people gravitated to expanding populated centers, where they engaged in a business or industry, or worked at jobs connected with them. As centers of population grew into cities, two major needs developed; more workers were needed to supply a growing job market, while additional food was required to feed the workers along with a rapidly growing urban population.

Fortunately, the farms of the country were able to supply both needs, but in the process farming changed from a way of life to a commercial enterprise, with surplus farm population migrating to cities instead of seeking other lands on which to farm. Additionally, they were joined by dissatisfied farmers who quit the farm in an effort to find more desirable employment in the city.

The continually rising importance of food to the nation's economy, plus the problem of feeding a growing labor force, focused the attention of the national leadership upon the task of providing vocational education to prospective farmers, along with those already engaged in farming.

To meet the pressure for trained workers, both on and off the farm, (capable of meeting the needs of the times) Congress in 1917 passed the Smith-Hughes Act, authorizing federal funds to promote at the secondary school level vocational programs in agriculture, trades and industries, and home economics.

Courses in agriculture achieved widespread acceptance, especially in rural schools where both farmers and prospective farmers were instructed in farm technology with the aim of training them "for proficiency in farming

occupations." Unfortunately, and largely because vocational education was new and without experienced people to direct it, the 1917 legislation was rigid in its requirements, rather than flexible enough for vocational education to change as the nation's manpower needs changed.

The real impact of the legislation was its endorsement of vocational education at the national level. Actually, its provisions were rooted in conditions existing prior to 1917, even though post World War II circumstances were beginning to emerge at its passage--circumstances causing some parts of the law to be obsolete even before they could be applied at the local level, particularly the stipulation in agriculture limiting the training to "...present and prospective farmers..."

Happily, the Morse-Perkins Act passed by Congress in 1963 recognizes agriculture as a broad field of employment and "opened up" vocational agriculture to provide training for occupations involving a "knowledge and skill in agricultural subjects," thus fulfilling a long time need.

The 1963 Vocational Act obligates each state to analyze its manpower needs and employment opportunities preparatory to long-range planning. For agriculture, census reports give information showing the downward trend in farm employment, but no similar material is available to describe the upsurge in manpower needs of off-farm agriculture.

To obtain such information--to identify the concerns engaged in non-farm agricultural activity and the jobs contained in them--Louisiana State University and the State Department of Education undertook a massive research program, beginning with the metropolitan areas and extending into the lesser populated areas of the State.

For accomplishing research outside of the metropolitan areas, Louisiana was divided into four areas, following the same pattern used by the State Department of Education for effecting supervision of vocational agriculture programs. Findings in this report cover Area I, comprising the parishes located in the northwest portion of the state. Information presented was obtained firsthand by agricultural instructors of the Area.

The metropolitan centers of Shreveport and Alexandria are located in Area I, as defined by the State Department of Education. However, these cities were a part of a survey of Louisiana metropolitan centers reported in L.S.U. Bulletins No. 6 and 7, published in February 1965. Consequently, research in Area I excludes these centers. It does include rural parishes of the Area, specifically: Bienville, Bossier, Claiborne, Caddo, DeSoto, Grant, Natchitoches, Sabine, Webster, and Winn.

Farming in the Area I centers about cotton, livestock, and forestry. In 1964, the Area reported 10,495 farms. People living on them had a spendable income of some \$75 million, including earnings received from non-farm work.

The Area described is serviced by 17 trade centers, located outside the cities of Shreveport and Alexandria. These centers had 233 businesses and agencies employing workers required to have a knowledge and skill in agricultural subjects for proper job performance.

In the whole of Area I, Shreveport had 221 nonfarm agricultural concerns, Alexandria had 139, and the rural centers had 233, or a total of 593.

This report contains information pertinent only to the 233 agricultural businesses and agencies studied in the 10-parish area defined.

Survey Purposes

The survey of Area I was made to accomplish several purposes considered timely:

1. To identify and classify according to occupational family all of the businesses and agencies having one or more job titles requiring the employee to have knowledge and skill in agricultural subjects;
2. To identify the competencies needed in agricultural subjects, or skills required, for job entry and advancement; and
3. To identify the special characteristics of all job titles found in nonfarm agricultural occupations, which include salary or wages, entry age, required formal education, farm experience, legal restrictions and union regulations, together with a description of work performed by workers holding a particular job title.

More generally, the purpose of the survey was to provide educators with a knowledge of present and emerging agricultural occupations, other than those in farming and ranching for which training programs have been developed. Hopefully, survey findings would be sufficient to stimulate and give direction to new training programs designed for youth in the Area interested in nonfarm agricultural employment.

Procedure

The research design called for the use of agricultural teachers in effecting the survey of nonfarm agricultural firms located in rural centers. In Area I, 18 agricultural teachers obtained the job information presented in this study by personal interviews with 233 concerns. These teachers were instructed in the interview technique and use of the schedule by University personnel. Actual surveys were made under the supervision of a member of the research staff responsible for the Project conducted state-wide.

Nonfarm agricultural businesses and agencies located in the Area were identified by local chambers of commerce, local agricultural teachers and telephone directories. Newspapers and radio stations gave support

and publicity to the survey.

Each teacher involved in the study was assigned a list of firms to contact, and was paid a fee of \$100 to work his list and obtain the information desired. The 18 teachers worked 233 businesses and agencies having employees using a knowledge of agriculture in job performance. Information about these workers form the basis for this report, besides contributing to the overall state report published under separate cover.

The firms and agencies participating in the survey contained 4,847 workers; 2,451 were required to have knowledge and skill in agricultural subjects.

Used in the gathering of information pertinent to nonfarm agricultural job titles in Area I, was the same schedule* employed in all areas of the state; also, in the metropolitan centers. This schedule was developed to identify the off-farm agricultural business or agency, the job titles involving agricultural knowledge and skill, along with a job description covering qualifications required for entry and advancement.

Treatment of Survey Information

In order to present and interpret survey information, the data were organized under three general categories, namely:

1. Occupational families
2. Classification of job titles into levels of employment and training required in agricultural subjects, and
3. Special requirements for job entry.

To provide for better coordination of summary data at the state and national level, occupational families were used as developed by the Center for Research and Leadership Development in Vocational and Technical Education at

*See Appendix A

The Ohio State University. These families are:

- Farm Machinery Sales & Service
- Farm Supplies & Equipment
- Livestock & Poultry
- Crops, Forestry & Soil Conservation
- Ornamental Horticulture
- Wildlife & Recreation
- Farm Service
- Agricultural Service

The number of employees was determined for each occupational family, as well as the number of workers needing competencies in agriculture now and five years hence. Job titles were determined by occupational family and projected new job titles were listed in each. Job titles were classified according to levels of employment: Professional, Technical, Managerial, Supervisory, Sales, Office, Skilled, Semiskilled, and Unskilled.

In each occupational family and level of employment, data were collected concerning job entry age, monthly salary, and number of employees needing knowledge or skill in each subject matter area, namely: Plant Science, Animal Science, Agricultural Business and Management and Farm Mechanics and Automation.

More specifically, requirements for each occupational family were determined according to each job level. Such employment essentials as: education, residential background, farm experience, and continuing education required for advancement were also determined.

Data in this study were intended to reveal occupational opportunities in nonfarm agriculture in the small towns and semi-urban areas of northwest Louisiana, and it may be noted that these data may serve as tools to be used by secondary school teachers and guidance counselors as they assist students in making vocational choices. Implementation of the facts interpreted in this study will provide a firm basis for future program development in vocational agricultural education.

PRESENTATION AND ANALYSIS OF SURVEY INFORMATION

A principal purpose of this study was to identify clusters of nonfarm agricultural jobs found in the agriculturally oriented businesses and agencies located in the northwest Louisiana sector, excluding Shreveport and Alexandria, with special regard to educational qualifications needed by prospective workers to effect satisfactory job entrance and continued progress in the field chosen. This presentation is made in an attempt to communicate agricultural occupational opportunities to those primarily concerned with the education of rural youth who face problems in finding a place in the labor force. Educational needs for job entry as expressed by employers were also summarized.

Occupational Families

Nonfarm agricultural businesses and agencies lend themselves to groupings called families which are appropriate for the work done or nature of service performed. Each grouping offers a wide range of occupations, according to variations in businesses making up a particular family. Specific jobs contained within a family grouping may require similar and yet different skills and abilities, depending upon level of performance and the work to be done.

Each of the 233 businesses and agencies in Area I were categorized in one of the eight major occupational families, losing the identity of the individual concern in the process of classification. The individual concern is shown only by type of service under each family, according to the following arrangement:

- I. Farm Machinery Sales and Service
 - Farm Machinery and Equipment Dealer
 - Automobile and Truck Dealer
 - Farm Equipment Prefabricator
 - Farm Implement Company
- II. Farm Supplies and Equipment
 - Hardware Store
 - Fence Company
 - Department Store
 - Feed and Seed Store
 - Building Supply Store
 - Fertilizer Company
 - Wholesale Distributing Company
 - Agricultural Chemical Dealer
 - Garden Center
 - Veterinarian Supply Company
 - Feed Mill
 - Dairy Farm Equipment Dealer
 - Farmers Cooperative
 - Lumber Company
 - Petroleum Dealer
 - Drug Store (Veterinarian Supplies)
 - Forestry Equipment Dealer
- III. Livestock and Poultry
 - Slaughter House
 - Butcher Shop
 - Meat Market
 - Egg Processing Company
 - Milk Distributorship
 - Creamery
 - Wholesale Meat Distributor
 - Dairy Products Company
 - Livestock Auction Barn
 - Hatchery
 - Grocery Store
 - Poultry and Egg Processing Company
 - Freezing and Storage Plant
 - Packing Plant
- IV. Crops, Forestry and Soil Conservation
 - Louisiana Forestry Commission
 - Tree Service Company
 - Logging Company
 - Produce Company
 - Forestry Service (U. S.)
 - Wood Preserving Company
 - Grain Company
 - Lumber Company
 - Timber Contractor
 - Food Store
 - Cotton Gin
 - Cotton Brokerage Company

- IV. Crops, Forestry and Soil Conservation (continued)
Cotton Division, Marketing Service
Seed Dealer
Cotton Warehouse
Wood Yards
Creosote Plant
Fruit and Vegetable Market
Grain Elevator
Feed Mill
Veneer Company
- V. Ornamental Horticulture
Garden Center
Nursery
Wholesale Florist
Landscape Company
- VI. Wildlife and Recreation
Golf Course
State Park
City Park
National Park
Playground
Golf Course Service Company
Country Club
Louisiana Wildlife and Fisheries Commission
State Parks and Recreation Commission
Bait Shop
Fish Market
- VII. Farm Service
Welding Company
Machine Shop
Electric Power Supplier
Pest Exterminating Company
Artificial Breeding Association
Credit Association
Farmers Home Administration
Realty Company
Insurance Company
Aero Farm Service
Water Well Company
Auto Repair Shop
Building Contractor
Livestock Brand Commission
Farm Service Laboratory
Airplane Service
Iron Works
Concrete Company
Land and Timber Company
Blacksmith

VII. Farm Service (continued)

- Farm Bureau
- Fertilizer and Lime Service
- Motor Repair Shop
- D.H.I.A. Supervisor
- Farm Dusting Service

VIII. Agricultural Service

- Animal Hospital
- Veterinarian
- Agricultural Stabilization and Conservation
- Agricultural Extension Service
- Soil Conservation Service
- State Department of Agriculture
- Vocational Agriculture Teacher
- U. S. Department of Agriculture
- Animal Disease Eradication (U.S.D.A.)
- Bank
- Agricultural Experiment Station
- Federal Land Bank Association
- U. S. Department of Interior
- U. S. D. A. Plant Pest Control

Number Employed in Nonfarm Agriculture

The number of agricultural businesses, industries, and agencies categorized according to occupational family is revealed in Table I. A total of 233 businesses and agencies were surveyed. More than 76 per cent of these firms were in Farm Supplies and Equipment, Crops, Forestry and Soil Conservation, Livestock and Poultry, and Farm Service. The greatest concentration was in Farm Supplies and Equipment.

Of the 4,847 employed in the eight occupational families 2,455 workers had agricultural competencies. Five years hence the number of jobs in which the employee needs agricultural competencies is expected to be 2,621--an increase of 7 per cent.

Table II indicates that over 50 per cent of those employed in non-farm agriculture in Northwest Louisiana were required to have competencies in agriculture. More than one-half of those employed needing agricultural

TABLE I
NUMBER OF AGRICULTURAL BUSINESSES, INDUSTRIES, AND AGENCIES GROUPED BY OCCUPATIONAL FAMILY, 1965

Occupational Family	Number	Per Cent
Farm Machinery Sales & Service	26	11.0
Farm Supplies & Equipment	60	25.8
Livestock & Poultry	38	16.3
12 Crops, Forestry & Soil Conservation	48	20.6
Ornamental Horticulture	6	2.6
Wildlife & Recreation	2	1.0
Farm Service	31	13.3
Agricultural Service	22	9.4
Total	233	100.0

TABLE II

NUMBER OF PERSONS EMPLOYED IN AGRICULTURAL BUSINESSES, INDUSTRIES
AND AGENCIES, AND NUMBER OF EMPLOYEES NEEDING AGRICULTURAL
COMPETENCIES, BY OCCUPATIONAL FAMILY

Occupational Family	Total Number of Employees	Current Employment	Employees Needing Agricultural Competencies			Per Cent In- crease Five Years Hence
			Per Cent Current	Expected Employment Five Years Hence	Per Cent In- crease Five Years Hence	
Farm Machinery Sales & Service	432	280	64.8	354	26.0	
Farm Supplies & Equipment	366	284	77.6	311	10.0	
Livestock & Poultry	618	295	47.7	303	2.0	
Crops, Forestry & Soil Conservation	2,973	1,247	42.0	1,283	3.0	
Ornamental Horticulture	19	17	89.5	19	11.0	
Wildlife & Recreation	25	11	44.0	19	72.0	
Farm Service	291	221	76.0	229	4.0	
Agricultural Service	123	96	78.0	103	7.0	
Total	4,847	2,451	50.6	2,621	7.0	

competencies were in the occupational family of Crops, Forestry and Soil Conservation. Occupational families, when ranked according to number of workers are:

- Crops, Forestry & Soil Conservation
- Livestock & Poultry
- Farm Supplies & Equipment
- Farm Machinery Sales & Service
- Farm Service
- Agricultural Service
- Ornamental Horticulture
- Wildlife & Recreation

Growth in number of employees needing skill in agricultural subjects was expected in all occupational families. Employers anticipated the addition of 170 workers over the coming five years. The overall increase when all families were considered was 7 per cent.

Job Titles According to Occupational Families and Levels of Employment

The 2,451 workers performing jobs requiring a knowledge in agriculture in the 233 establishments surveyed held 438 different job titles as indicated by Table III. The number of job titles five years hence is expected to increase by 29.

A detailed list of the eight occupational families, together with the total number of workers in each job title is found in Appendix D.

Job titles appear in sufficient quantity in all eight families to challenge the occupational interest of youth, and it might be pointed out that an increase of approximately 7 per cent in the number of job titles five years hence indicates a healthy growth of agricultural opportunity.

TABLE III

NUMBER OF JOB TITLES IN AGRICULTURAL OCCUPATIONS OTHER THAN FARMING BY OCCUPATIONAL FAMILIES

Occupational Family	Number of Job Titles	Number of Job Titles Five Years Hence	Per Cent Job Title Increase Five Years Hence
Farm Machinery Sales & Service	46	48	4.3
Farm Supplies & Equipment	62	67	8.0
Livestock & Poultry	70	77	10.0
Crops, Forestry & Soil Conservation	142	148	4.2
Ornamental Horticulture	6	6	0.0
Wildlife & Recreation	7	8	14.3
Farm Service	70	75	7.1
Agricultural Service	35	38	8.6
Total	438	467	6.6

Levels of Employment in Nonfarm Agriculture

A listing of the number of individuals employed in the various job titles and by level of employment in Table IV reveals opportunities available to youth. A ranking of level of employment frequency in all occupational families is as follows: (1) Semiskilled, (2) Skilled, (3) Managerial, (4) Unskilled, (5) Sales, (6) Office, (7) Supervisory, (8) Professional, (9) Technical.

A concentration is shown in the semiskilled level of employment in Crops, Forestry and Soil Conservation. This occupational family represents over 50 per cent of the total agriculturally trained workers. Of this group, skilled, semiskilled and unskilled levels of employment accounted for 81 per cent of the workers. The management level of employment appeared to offer more opportunities in Livestock and Poultry, and Farm Supplies and Equipment. Employment in the sales level was concentrated in Farm Machinery Sales and Service, and Farm Supplies and Equipment. Almost 50 per cent of the professional workers were employed in Crops, Forestry and Soil Conservation.

Job Entry Age for Nonfarm Agricultural Workers

Average age of all employees was secured for each of the 233 firms and agencies by occupational family and for each level of employment. Consideration was given to the Present age, Minimum age for entry, and the Maximum age for entry.

It was interesting to note that the average minimum age for entry in all occupational families and for practically all levels of employment was centered around 22. It was somewhat higher with jobs having more responsibilities. The average maximum age for job entry was 50 years .

TABLE IV

TOTAL EMPLOYEES WITH AGRICULTURAL TRAINING BY LEVELS OF EMPLOYMENT IN OCCUPATIONAL FAMILIES

Occupational Family	Levels of Employment										Total	Per Cent
	Prof.	Tech.	Mana- gerial	Super- visory	Sales	Office	Skilled	Semi- skilled	Un- skilled			
Farm Machinery Sales & Service	22	0	38	15	81	17	92	13	2	280	11.4	
Farm Supplies & Equipment	0	1	81	4	64	21	20	43	50	284	11.5	
Livestock & Poultry	0	13	83	16	20	19	34	110	0	295	12.0	
Crops, Forestry & Soil Conservation	53	24	45	77	7	25	355	465	196	1247	51.0	
Ornamental Horticulture	0	0	8	0	0	0	0	0	9	17	0.7	
Wildlife & Recreation	4	1	2	3	0	0	0	0	1	11	0.4	
Farm Service	3	14	34	11	12	30	28	56	33	221	9.0	
Agricultural Service	26	6	10	5	0	30	15	4	0	96	4.0	
Total	108	59	301	131	184	142	544	691	291	2,451	100.0	
Per Cent	4.4	2.4	12.3	5.3	7.5	5.8	22.2	28.3	11.8	100.0		

It would seem, since the average entry age is 22 years, that possibly youngsters are not adequately prepared for job entry for specific occupations upon graduation from high school and that some four or more years additional training is necessary to effect job entry. It is quite plausible that if individuals should receive sufficient training in occupational skills while still enrolled in the secondary school, the age of job entry would be reduced.

Average ages for each occupational family and for each level of employment within the occupational family are indicated in Tables V-1 through V-8.

Salaries of Employees Working in Nonfarm Agriculture

Median monthly salaries or wages were calculated for all occupational families and for each level of employment. The median monthly salaries, including Beginning, Present and Maximum are shown in Tables VI-1 through VI-8.

The median monthly wages for jobs at the Skilled level in Farm Machinery Sales and Service; Farm Supplies and Equipment; and Crops, Forestry and Soil Conservation exceeded the wages for the Unskilled by \$100 or more. In Farm Service the Skilled workers earned upward of \$200 monthly more than the Unskilled.

An analysis of salaries indicated that employees were paid in line with training and responsibility, starting with a low income for the unskilled and advancing through sales, supervisory, managerial and professional.

Professional, technical, managerial and supervisory employees accounted for 24 per cent of the employees. Their beginning median salaries ranged from \$201 to a high of \$409 with maximum median salaries of \$506 to \$776 per month

TABLE V-1

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	32	25	36	9
Technical	0	0	0	0
Managerial	38	26	49	28
Supervisory	40	28	46	11
Sales	37	21	50	17
Office	32	22	45	12
Skilled	35	21	46	28
Semiskilled	28	21	41	8
Unskilled	30	21	45	1

TABLE V-2

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	40	30	55	1
Managerial	43	25	52	65
Supervisory	38	24	52	3
Sales	39	22	50	28
Office	35	21	51	17
Skilled	40	21	49	13
Semiskilled	35	20	48	18
Unskilled	38	18	48	17

TABLE V-3

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	38	21	48	6
Managerial	40	24	50	62
Supervisory	40	22	47	12
Sales	36	22	50	11
Office	36	20	51	14
Skilled	40	21	51	24
Semiskilled	36	19	53	34
Unskilled	0	0	0	0

TABLE V-4

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	37	23	51	32
Technical	36	22	49	9
Managerial	43	26	53	38
Supervisory	45	27	55	47
Sales	47	23	51	4
Office	39	23	53	18
Skilled	41	22	54	90
Semiskilled	39	19	54	70
Unskilled	38	20	53	14

TABLE V-5

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	0	0	0	0
Managerial	45	22	51	7
Supervisory	0	0	0	0
Sales	0	0	0	0
Office	0	0	0	0
Skilled	0	0	0	0
Semiskilled	0	0	0	0
Unskilled	32	21	49	5

TABLE V-6

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	35	21	65	2
Technical	42	20	65	1
Managerial	44	23	55	2
Supervisory	42	21	65	1
Sales	0	0	0	0
Office	0	0	0	0
Skilled	0	0	0	0
Semiskilled	0	0	0	0
Unskilled	40	18	55	1

TABLE V-7

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

FARM SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	34	21	48	3
Technical	37	22	54	7
Managerial	40	26	51	32
Supervisory	41	24	51	6
Sales	39	23	58	10
Office	37	22	53	24
Skilled	36	21	48	7
Semiskilled	34	19	53	12
Unskilled	35	18	51	5

TABLE V-8

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM
AGRICULTURAL OCCUPATIONS BY OCCUPATIONAL FAMILY,
AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	40	23	56	24
Technical	47	22	54	4
Managerial	42	27	58	10
Supervisory	38	23	50	4
Sales	0	0	0	0
Office	43	20	60	21
Skilled	24	18	53	3
Semiskilled	39	18	55	3
Unskilled	0	0	0	0

TABLE VI-1

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$701.00	\$701.00	\$701.00
Technical	.00	.00	.00
Managerial	626.00	700.00	701.00
Supervisory	442.00	538.00	538.00
Sales	375.00	475.00	701.00
Office	251.00	310.00	425.00
Skilled	301.00	351.00	506.00
Semiskilled	234.00	251.00	284.00
Unskilled	175.00	225.00	275.00

TABLE VI-2

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$.00	\$.00	\$.00
Technical	425.00	475.00	525.00
Managerial	354.00	488.00	554.00
Supervisory	375.00	525.00	525.00
Sales	246.00	351.00	401.00
Office	228.00	283.00	415.00
Skilled	245.00	279.00	315.00
Semiskilled	201.00	231.00	333.00
Unskilled	187.00	185.00	229.00

TABLE VI-3

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$.00	\$.00	\$.00
Technical	451.00	601.00	675.00
Managerial	383.00	482.00	540.00
Supervisory	430.00	601.00	651.00
Sales	375.00	426.00	509.00
Office	195.00	235.00	251.00
Skilled	241.00	325.00	351.00
Semiskilled	195.00	230.00	251.00
Unskilled	.00	.00	.00

TABLE VI-4

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$534.00	\$700.00	\$701.00
Technical	393.00	482.00	559.00
Managerial	551.00	667.00	701.00
Supervisory	440.00	518.00	567.00
Sales	625.00	700.00	701.00
Office	301.00	351.00	413.00
Skilled	315.00	372.00	410.00
Semiskilled	258.00	299.00	361.00
Unskilled	195.00	232.00	268.00

TABLE VI-5

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$.00	\$.00	\$.00
Technical	.00	.00	.00
Managerial	338.00	475.00	701.00
Supervisory	.00	.00	.00
Sales	.00	.00	.00
Office	.00	.00	.00
Skilled	.00	.00	.00
Semiskilled	.00	.00	.00
Unskilled	175.00	219.00	258.00

TABLE VI-6

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$425.00	\$575.00	\$701.00
Technical	325.00	425.00	475.00
Managerial	201.00	225.00	375.00
Supervisory	325.00	425.00	475.00
Sales	.00	.00	.00
Office	.00	.00	.00
Skilled	.00	.00	.00
Semiskilled	.00	.00	.00
Unskilled	175.00	225.00	275.00

TABLE VI-7

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$400.00	\$625.00	\$701.00
Technical	325.00	525.00	525.00
Managerial	511.00	661.00	701.00
Supervisory	501.00	601.00	601.00
Sales	325.00	475.00	584.00
Office	301.00	401.00	451.00
Skilled	409.00	459.00	509.00
Semiskilled	201.00	251.00	276.00
Unskilled	193.00	243.00	275.00

TABLE VI-8

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING,
BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	\$451.00	\$651.00	\$701.00
Technical	425.00	550.00	625.00
Managerial	525.00	675.00	701.00
Supervisory	325.00	551.00	601.00
Sales	.00	.00	.00
Office	287.00	364.00	437.00
Skilled	263.00	325.00	339.00
Semiskilled	225.00	275.00	275.00
Unskilled	.00	.00	.00

Beginning median salaries for sales workers in Farm Machinery Sales and Service and Crops, Forestry and Soil Conservation ranged from \$375 to \$675 per month. Maximum median salaries were above \$700 per month.

This study did not reveal large numbers employed at the technical level; however, this level of employment offered attractive beginning salaries with substantial increases as the worker gained tenure and experience. Livestock and Poultry, Farm Service, and Crops, Forestry and Soil Conservation families employed 86 per cent of the workers at the technical level.

Educational Level Desired of Persons Entering Nonfarm Agricultural Occupations

Data in Table VII reveal the educational level desired of persons entering agricultural occupations other than farming. This information was for each occupational family by number of employees desired at each educational level. As in any other business endeavor, where efficiency in operation is the determining factor, the management of nonfarm agricultural businesses did not desire individuals possessing less than a high school education. Only 5.7 per cent of those employed were found to have less than high school training.

For job entry in the families of Agricultural Service and Farm Machinery Sales and Service prospective workers need more than a high school education; 62.5 and 55.2 per cent respectively

The expression of employers for individuals with college training was of special significance. Only 108 employees were classified at the professional level, yet employers indicated that college training was necessary for 442 or 18 per cent of all employees having knowledge and skill in agriculture.

TABLE VII

EDUCATIONAL LEVEL DESIRED OF PERSONS ENTERING AGRICULTURAL OCCUPATIONS OTHER THAN FARMING

Occupational Family	Number of Employees	Number of Employees									
		Less Than High School		High School Graduate		Post H. S. Tech. Educ.		Some College		College Degree	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	280	1	.4	114	40.8	43	15.3	31	11.0	88	31.4
										3	1.1
Farm Supplies & Equipment	284	8	2.8	200	70.4	11	3.9	22	7.7	28	9.9
										15	5.3
Livestock & Poultry	295	5	1.7	192	65.1	34	11.5	20	6.8	28	9.5
										16	5.4
Crops, Forestry & Soil Conservation	1,247	105	8.4	975	78.3	36	2.9	33	2.6	84	6.7
										14	1.1
Ornamental Horticulture	17	0	.0	12	70.6	0	.0	3	17.6	1	5.9
										1	5.9
Wildlife & Recreation	11	0	.0	6	54.5	0	.0	1	9.1	4	36.4
										0	.0
Farm Service	221	21	9.5	134	60.6	17	7.7	22	10.0	27	12.2
										0	.0
Agricultural Service	96	0	.0	36	37.5	10	10.4	11	11.5	39	40.6
										0	.0
Total	2,451	140	5.7	1,669	68.1	151	6.2	143	5.8	299	11.3
										49	2.0

Of the total of 278 college graduates, the highest number -- 172 employees or 60 per cent -- were located in Farm Machinery Sales and Service and Crops, Forestry and Soil Conservation. Workers having a post high school technical education numbered 151, or 6 per cent of the total: three-fourths of them were in Farm Machinery Sales and Service; Livestock and Poultry; and Crops, Forestry and Soil Conservation.

The study records only three vocational agriculture teachers when actually there were 61 employed according to the Louisiana State Board of Education. This explains the reason for the college trained personnel not being as high as the three companion rural and semi-urban area studies.

Residential Background Preferred of New Employees

Generally, it has been assumed that employers in nonfarm agricultural businesses employ workers who were farm reared, an assumption supported by data gathered from 233 firms of the Northwest Louisiana rural area: 64 per cent of their employees would be replaced by new workers with a farm background.

Table VIII indicates by occupational family the kind of background desired of agricultural workers.

Three of four prospective employees would be required to have a farm residential background in families: Agricultural Service; Wildlife and Recreation; Ornamental Horticulture; and Crops, Forestry and Soil Conservation. In the other families, one of two prospective workers need a farm background.

TABLE VIII

RESIDENTIAL BACKGROUND PREFERRED OF NEW EMPLOYEES

Occupational Family	Number of Employees	Farm		Rural Nonfarm		Urban		No Preference	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	280	144	51.4	10	3.6	0	0.0	126	45.0
Farm Supplies & Equipment	284	172	60.6	7	2.4	0	0.0	105	37.0
Livestock & Poultry	295	167	56.6	32	10.8	0	0.0	96	32.6
Crops, Forestry & Soil Conservation	1,247	892	71.5	100	8.0	1	0.1	254	20.4
Ornamental Horticulture	17	13	76.5	0	0.0	0	0.0	4	23.5
Wildlife & Recreation	11	9	81.8	0	0.0	0	0.0	2	18.2
Farm Service	221	103	46.6	25	11.3	4	1.8	89	40.3
Agricultural Service	96	79	82.3	12	12.5	2	2.1	3	3.1
Total	2,451	1,579	64.4	186	7.6	7	0.3	679	27.7

Farm Experience Preferred of New Employees

Findings presented in Table IX show that 1,579, or 65 per cent, of the workers in nonfarm agricultural concerns, using a knowledge and skill in agriculture, were required to have farm experience.

Commercial type farm experience was preferred for only 267 or 17 per cent of the jobs; whereas, employers required that 231 or 15 per cent of the employees should have non-commercial farm experiences. No preference as to the type of farm experience was expressed for 1,081 or 68 per cent of the employees.

It is significant to note that employers in Crops, Forestry and Soil Conservation indicated no preference as to type farm experience for 88 per cent of the jobs; whereas, 100 per cent of the workers in Wildlife and Recreation were required to have farm experience with no preference as to kind. It was also significant that 61 per cent of the new employees in Farm Machinery Sales and Service are acceptable with non-commercial farm experience; while 54 per cent of the new employees in Ornamental Horticulture must show commercial farm experience.

Agricultural Subjects in Which Prospective Workers Must Have Knowledge or Skill

To determine job requirements in terms of knowledge and skill in agricultural subjects was a major objective of the survey. Adjustments in training programs must be made to conform with qualifications demanded of youth when applying for jobs in any one of the occupational families regardless of employment level.

For purposes of obtaining and recording knowledge and skill in agricultural subjects needed to effect job entry, agriculture was divided into

TABLE IX

FARM EXPERIENCE PREFERRED OF NEW EMPLOYEES

Occupational Family	Number of Employees	Commercial Farm		Non-Commercial Farm		No Preference	
		No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	144	33	23.0	88	61.0	23	16.0
Farm Supplies & Equipment	172	60	35.0	19	11.0	93	54.0
Livestock & Poultry	167	47	28.0	44	26.0	76	46.0
Crops, Forestry & Soil Conservation	892	64	07.0	46	05.0	782	88.0
Ornamental Horticulture	13	7	54.0	3	23.0	3	23.0
Wildlife & Recreation	9	0	0.0	0	0.0	9	100.0
Farm Service	103	26	25.5	22	21.0	55	53.5
Agricultural Service	79	30	38.0	9	11.0	40	51.0
Total	1,579	267	17.0	231	15.0	1,081	68.0

four subject matter areas: 1) Animal Science, 2) Plant Science, 3) Agricultural Business Management and Marketing, and 4) Agricultural Mechanization and Automation. Each subject matter area was further divided into competency areas and were checked Necessary, Desirable or Not Necessary. In calculating the competency index, a numerical value of three was given to the competency checked Necessary, two was given when checked Desirable, and one was given when checked Not Necessary. With the information recorded as listed above, the Computer Center at Louisiana State University calculated mean competency rating by occupational family and level of employment. It was determined that the following scale would be used to rate the competencies as to high, medium and low: High (1.800 - 3.000), Medium (1.400 - 1.799), Low (1.000 - 1.399)

Tables X-1 through X-8 indicate the agricultural subject area in each occupational family with which employees must be familiar at each level of employment.

Each occupational family and the nine levels of employment structured for this study served as a basis for determining the agricultural subject areas with which the individual must be familiar to secure initial employment.

Certain discernible trends were established in all occupational families: 1) generally, a rather broad coverage of all subject matter areas was required of all workers, 2) the work performed within a particular family tended to prescribe the subject matter area or areas involved, 3) workers at the management and supervisory levels were widely knowledgeable, and 4) employees at the Professional, Technical, and Skilled levels were intensively trained in a particular area or one of the divisions of subject matter making up an area.

TABLE X-1

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

FARM MACHINERY SALES AND SERVICE

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	22	1.000	1.717	1.500	1.870
Technical	0	0	0	0	0
Managerial	38	1.594	1.792	2.125	2.060
Supervisory	15	1.125	1.488	1.557	2.076
Sales	81	1.544	1.663	1.868	1.912
Office	17	1.073	1.129	1.885	1.278
Skilled	92	1.134	1.195	1.313	2.042
Semiskilled	13	1.188	1.284	1.500	1.938
Unskilled	2	1.000	1.000	1.000	1.333

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-2

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

FARM SUPPLIES AND EQUIPMENT

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	1	1.000	1.909	2.000	1.333
Managerial	81	1.750	1.797	1.954	1.797
Supervisory	4	1.917	1.848	1.958	1.722
Sales	64	1.902	1.740	1.763	1.851
Office	21	1.250	1.342	1.897	1.245
Skilled	20	1.538	1.259	1.644	2.077
Semiskilled	43	1.146	1.278	1.271	1.648
Unskilled	50	1.287	1.396	1.132	1.598

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE V-3

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

LIVESTOCK AND POULTRY

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	13	2.438	1.167	1.979	1.722
Managerial	83	2.181	1.361	2.117	1.855
Supervisory	16	2.281	1.144	2.250	2.305
Sales	20	1.977	1.000	2.023	1.424
Office	19	1.902	1.032	2.250	1.286
Skilled	34	2.151	1.121	1.484	1.500
Semiskilled	110	1.743	1.072	1.294	1.505
Unskilled	0	0	0	0	0

Competency Rating Scale
 High (1.800-3.000)
 Medium (1.400-1.799)
 Low (1.000-1.399)

TABLE X-4

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	53	1.242	2.170	2.340	1.885
Technical	24	1.375	1.848	1.944	1.852
Managerial	45	1.227	1.715	2.566	1.943
Supervisory	77	1.016	1.518	1.915	2.007
Sales	7	1.188	1.591	1.750	1.292
Office	25	1.000	1.333	2.083	1.278
Skilled	355	1.024	1.300	1.293	1.833
Semiskilled	465	1.020	1.299	1.191	1.702
Unskilled	196	1.080	1.325	1.196	1.702

Competency Rating Scale
 High (1.800-3.000)
 Medium (1.400-1.799)
 Low (1.000-1.399)

TABLE X-5

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

ORNAMENTAL HORTICULTURE

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	0	0	0	0	0
Managerial	8	1.000	2.234	2.000	1.952
Supervisory	0	0	0	0	0
Sales	0	0	0	0	0
Office	0	0	0	0	0
Skilled	0	0	0	0	0
Semiskilled	0	0	0	0	0
Unskilled	9	1.000	1.836	1.025	1.900

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-6

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

WILDLIFE AND RECREATION

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	4	1.500	2.000	1.750	2.167
Technical	1	2.125	1.727	1.000	1.500
Managerial	2	1.250	1.000	2.000	1.167
Supervisory	3	1.625	1.909	1.375	2.167
Sales	0	0	0	0	0
Office	0	0	0	0	0
Skilled	0	0	0	0	0
Semiskilled	0	0	0	0	0
Unskilled	1	1.750	1.455	1.000	1.500

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-7

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

FARM SERVICE

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	3	1.667	1.606	2.208	1.444
Technical	14	1.857	1.519	2.143	1.643
Managerial	34	1.406	1.537	2.102	1.812
Supervisory	11	1.333	1.500	2.354	2.139
Sales	12	1.550	1.727	2.387	1.883
Office	30	1.177	1.167	2.010	1.153
Skilled	28	1.000	1.000	1.214	2.167
Semiskilled	56	1.073	1.212	1.229	1.792
Unskilled	33	1.000	1.145	1.100	2.033

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

TABLE X-8

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR BY OCCUPATIONAL FAMILIES

AGRICULTURAL SERVICE

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	26	2.365	2.428	2.672	2.111
Technical	6	1.500	2.045	1.906	1.667
Managerial	10	1.412	1.964	2.175	1.583
Supervisory	5	1.438	2.023	1.969	1.875
Sales	0	0	0	0	0
Office	30	1.250	1.723	1.970	1.381
Skilled	15	1.000	1.697	1.333	1.222
Semiskilled	4	1.542	2.091	1.875	2.000
Unskilled	0	0	0	0	0

Competency Rating Scale:

High (1.800-3.000)

Medium (1.400-1.799)

Low (1.000-1.399)

Employers were in general agreement that workers at the Management, Supervisory and Sales levels must have broad training extending over all agricultural subject areas; while those in the Professional, Technical and Skilled classifications were expected to have intensive training in the area of their speciality. The product sold or service performed influenced the emphasis placed upon training desired in the agricultural subject areas.

In a majority of the cases, businesses and agencies favored training in all agricultural areas, with emphasis upon one or more areas dealing directly with the work or service to be performed. There was general agreement that most workers in nonfarm agriculture, including office workers in many instances, need a broad agricultural background. Some specialization had to be acquired either by training or experience at all levels except the Unskilled. The employers reported that they desired unskilled workers with more skills than they had, but in reality the employers were stating they needed employees that were above the Unskilled level of training.

Continuing Education Required of Employees with Educational Facilities Used

Employers were asked to indicate in-service training needed by employees to advance on the job, designating educational facilities used or provided for such training.

This information is shown in Table XI by occupational family and according to educational facility used.

A majority of employees covered by this study, 94 per cent, participated in educational programs designed to upgrade them on-the-job and for job advancement. On-the-job training programs ranged from a low of 77 per cent for Farm Machinery Sales and Service to a high of 98 per cent for each Farm Supplies and Equipment and Crops, Forestry and Soil Conservation. The firm

TABLE XI

CONTINUING EDUCATION REQUIRED BY FIRMS TO ADVANCE IN OCCUPATIONS

Occupational Family	Number of Employees	Number of Employees											
		Firm or Industry School			On-the-Job Training			Public School Adult Educ.			Vocational School		
		No.	Cent.	Per	No.	Cent.	Per	No.	Cent.	Per	No.	Cent.	Per
Farm Machinery Sales & Service	280	179	64.0	214	76.5	11	3.9	31	11.1	17	6.1	3	1.1
Farm Supplies & Equipment	284	170	59.9	279	98.2	2	0.7	6	2.1	12	4.2	0	0.0
Livestock & Poultry	295	169	57.3	274	92.9	6	2.0	18	6.1	33	11.2	0	0.0
Crops, Forestry & Soil Conservation	1,247	1,110	89.0	1,224	98.2	21	1.7	50	4.0	65	5.2	3	0.2
Ornamental Horticulture	17	8	46.3	15	88.2	0	0.0	3	17.6	6	35.3	0	0.0
Wildlife & Recreation	11	4	36.4	10	90.0	0	0.0	0	0.0	5	45.5	0	0.0
Farm Service	221	183	82.8	200	90.5	2	0.9	15	6.8	6	2.7	1	0.5
Agricultural Service	96	40	41.7	93	96.9	4	4.2	2	2.1	28	29.2	0	0.0
Total	2,451	1,863	76.1	2,309	94.2	46	1.9	125	5.1	172	7.0	7	0.3

or industry school received the second highest rating with a low of 36 per cent for Wildlife and Recreation and a high of 89 per cent for Crops, Forestry and Soil Conservation. As expected many of the employers required on-the-job training and participation in firm or industry school programs to advance in the occupation or even to hold the job. Agricultural colleges, public school adult education programs and vocational schools were used in only a small percentage of the cases. It was of special significance that employers indicated continuing education for more than 99% of all employees having knowledge and skill in agriculture. Agricultural Service showed that 29 per cent of its workers had further training in an agricultural college which represented primarily state and federal agricultural professional employees.

Expression of a general desire by employers to have continuing education available for their employees, and the fact that in most cases the present training was on-the-job training and firm or industry schools, points up a great need for expanded vocational programs in the public school system.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

It has long been felt that vocational agriculture should reflect the occupational opportunities offered to youth in the entire field of agriculture -- that adjustments in aims should be made with a changing agriculture. Change today is quite evident, eliminating the need for many workers in agricultural production. Farms are growing much larger, but require fewer workers to produce more. Jobs once done on the farm are now being performed in towns and cities where thriving agricultural concerns are busy servicing the farmer and handling his products. These concerns in combination now employ as many or more people than are needed in production agriculture.

Evolving in nonfarm agriculture is a great host of occupations, besides those found on the farm. In the Area covered by this report jobs were found at all levels of employment dealing with processing farm products, marketing and services to the farmer. All of the businesses and agencies engaged in these activities employ workers who use knowledge and skill in agricultural subjects for proper job performance. Generally, preparation in agriculture for the work performed by individual employees was obtained by experience, or on-the-job training. In the years ahead, employers are expected to look for younger employees trained in agriculture at the time of job entry.

The major task in this research dealt with identifying businesses and agencies serving agriculture in the Northwest Area of Louisiana; along with the jobs they contain requiring a knowledge of agriculture, with

the kind of knowledge or skill involved. It was assumed that such information will be useful to parents, students and educators when planning training programs for boys interested in nonfarm agricultural occupations.

Summary

A summary of findings follows:

1. Two hundred and thirty-three agricultural firms were surveyed in the ten Northwest Louisiana parishes (excluding the Shreveport and Alexandria metropolitan areas). These organizations employed 4,847 individuals; of this number 2,451 or 51 per cent had competencies in agriculture. Some 170 additional employees who possess agricultural skills will be needed in the next five years.
2. A total of 438 job titles was indicated by all employers with an increase of 29 over the next five years.
3. More than 78 per cent of the job titles were found in four occupational families, namely; Farm Supplies and Equipment, Livestock and Poultry, Crops, Forestry and Soil Conservation, and Farm Service. Over 32 per cent of the job titles were in Crops, Forestry and Soil Conservation.
4. Employees were found in all occupational families and in nine levels of employment. Some 1,247 employees (over 50 per cent) were located in Crops, Forestry and Soil Conservation with 65 per cent of these working in the skilled and semiskilled levels of employment. The management levels of employment appear to offer more opportunities in Livestock and Poultry, and Farm Supplies and Equipment; sales offer more opportunities in Farm Machinery Sales and Service, and Farm Supplies and Equipment.
5. The professional level of employment was represented in all occupational families except Farm Supplies and Equipment, Livestock and Poultry and Ornamental Horticulture.
6. Technicians were not found in Farm Machinery Sales and Service and Ornamental Horticulture.
7. The mean minimum age for job entry in all occupational families, and for practically all levels of employment, was 22 years. It was somewhat higher with jobs having more responsibilities. The average maximum age for entry was 50 years.
8. Beginning salaries were paid in keeping with training and responsibility, starting with a low income for the unskilled and advancing through sales, supervisory, managerial and professional.

9. Professional, technical, managerial and supervisory employees accounted for 24 per cent of the total with beginning median salaries ranging from a low of \$325 to over \$700 per month except at the managerial level in Wildlife and Recreation.
10. Sales, as a level of employment, commands a strong position when compared to beginning salaries in many other levels.
11. Management in nonfarm agricultural concerns did not desire to employ individuals with less than a high school education.
12. A preference for some college training was expressed for more than 18 per cent of prospective employees in all occupational families.
13. Some 64 per cent of the positions in all of the occupational families were given "farm" as the residential background preferred of new employees.
14. Employers in nonfarm agriculture who are concerned about the residential background of their workers will employ those from rural nonfarm and urban backgrounds but preferred those with a farm background in 89 per cent of the cases.
15. Commercial type farm experience was acceptable by employers for 17 per cent of the jobs; employers for more than 15 per cent of the workers accepted individuals who had experience on the non-commercial type of farm. The findings reveal that 68 per cent of the employers stated "no-preference" between commercial or non-commercial but wanted new employees to have farm experience.
16. The professional, managerial, supervisory and sales levels of employment in most occupational families generally required broad training extending over all agricultural subject fields, yet required a concentration in one specific area.
17. The semiskilled and unskilled workers were required to be familiar with agricultural subject areas.
18. On-the-job training and firm or industry schools were used most frequently as a means of supplying continuing education. This was true in 94 per cent and 76 per cent of the cases, respectively.
19. Over 50 per cent of the employees in the nonfarm businesses and agencies were classified in the skilled and semiskilled levels of employment.
20. Without exception, some knowledge and skill in agricultural subjects was required by all job titles for office personnel. These job titles required a broad general knowledge in agricultural terminology and customs, but were specific in the area of office and business management procedures.

Conclusions

The research undertaken, covering the rural nonfarm agricultural complex of Northwest Louisiana, identified 233 concerns employing 4,847 workers of whom 2,451 (51 per cent) were required to have and use knowledge and skill in agricultural subjects. Many of these workers did not experience specific training in preparation for job titles held, yet they did receive on-the-job training involving agricultural subjects appropriate to work performed. Management in all firms surveyed expressed repeatedly the need for workers with pre-job training to fill vacancies and new positions.

It is clear that occupational opportunities in nonfarm agriculture are available to youth in the Area. Equally clear is that pre-job training at the high school level will materially aid interested youth in taking advantage of their opportunities, if a high school education is obtained along with training in agriculture appropriate to the kind of work desired.

Analysis of data contained in this study conveys to educators and youth in Northwest Louisiana an image of the importance of nonfarm agriculture as a source of occupations in agriculture, including specific job requirements and implications for pre-job training programs. Conclusions in support of this claim follow:

1. The rural and semi-rural sections of the Area contain a host of nonfarm agricultural concerns, with a number in each of the eight families of nonfarm agricultural occupations. These businesses and agencies employ workers at all levels, with more than one-half of them using a knowledge or skill in agricultural subjects. Both job titles and numbers of employees are on the increase, offering even greater opportunities of employment to youth.
2. Nonfarm agricultural concerns in the Area employ workers above the unskilled level. Prospective workers without agricultural skills have one chance in ten of obtaining satisfactory employment.

3. Occupations available in nonfarm agricultura are in businesses and agencies having a greatly diversified function. Firms in sizeable numbers are engaged in processing; wholesaling; agricultural services; and recreational, but the greatest concentration is in retail sales.
4. Prospective workers in nonfarm agriculture without required pre-job education and training must qualify by working at other occupations, involving a period of time approximating five years. Those with proper qualifications acquired in school can move directly into nonfarm agricultural jobs following high school, or college graduation.
5. Satisfactory jobs in nonfarm agricultural concerns are not available to applicants having less than a high school education. Moreover, many job titles require education and training beyond the secondary school level, a requirement that is advancing. All applicants for occupations at the professional level must have appropriate college degrees.
6. Employment in nonfarm agricultural concerns is extended first to those having a farm residential background, supported by farm experience; however, farm experience is not a rigid requirement for employment. Rather, emphasis is placed upon education and training.
7. Salaries for all levels of employment are commensurate with the training and skills possessed by the worker. Occupational progress, financially, is also parallel to individual capacity to increase level of performance. Jobs at the professional, technical and managerial levels demand more training but also pay more. Jobs at the semiskilled and unskilled levels pay less, require a limited amount of training and offer little hope for advancement.
8. Continuous training, regardless of employee rank is expected in all occupational families. Over three-fourths of the employers have their workers to acquire training on-the-job and at a firm or industry school in order to advance in rank or salary. Secondary schools and colleges may render a greater service with effective in-service training programs.

Recommendations

The traditional function of the Louisiana high school is to provide schooling at the elementary and secondary levels. The rural, as well as the urban, high school must anticipate change if it is to be functional

in the lives of people. In general, schools must periodically adjust to at least two areas of change, namely: economic and sociological. Adjustments are mainly made by means of new programs or innovations based upon factors and forces which affect the future of students.

In order for the program in vocational agriculture to be effective today, it must offer a program of instruction and experience in keeping with the educational needs of youth with emphasis on individual vocational needs in the work world. This can be accomplished by identifying the vocational needs of youth and then providing an educational program to match their needs.

The growing employment market in agriculture is in the establishments that process, service, supply and equip agricultural production. It is a generally accepted fact that the number of farmers is on the decline, yet agriculture continues to be the number one industry in number and variety of jobs offered.

If vocational education in agriculture is to fulfill its functions effectively, the program must be continually evaluated, adjusted and extended to meet the needs and demands of current technological developments, as well as the new social and economic conditions.

Nonfarm agricultural concerns in the Area studied need a continuing supply of workers equipped with a high school education and competencies in agricultural subjects. The high schools of the Area are the best organized centers, besides being more accessible to youth, for providing the kind of training programs needed to qualify youth for employment in nonfarm agricultural occupations.

Traditionally, the high school has been concerned with the preparation of youth for proficiency in farming occupations. Changing conditions

on the farm, together with a rising nonfarm agricultural enterprise, now obligates the high school to add another dimension to its offering for accomplishing more than one level of attainment in vocational agriculture -- that of training interested and capable youth for service in occupations connected with but off the farm.

A more effective instructional base must be provided for vocational agriculture to deal with individual occupational interests and capabilities. Currently, instruction is centered around the home farm, offering few effective instructional provisions for individual differences. To improve the main organizational center -- the high school -- other and additional sub-centers must be established if rural youth are to get appropriate school experiences in preparation for nonfarm agricultural occupations.

School use of nonfarm agricultural businesses and agencies for providing pre-job training experiences will relate and focus action on individual differences.

Data gathered from the Area studied form a background for suggestions that can be used by educators in organizing the high school for learning activities basic to qualifying students in vocational agriculture for employment in nonfarm agricultural jobs:

1. In providing for individual differences among students with occupational objectives in agriculture, local school administrators and teachers must realize that for any teaching act so comprehensive, several important curriculum changes must be made:
 - a. Determine instructional objectives, according to student occupational objectives;
 - b. Adapt instructional materials in production agriculture to form a basic program for all trainees;
 - c. Provide, for advanced students, instructional materials related to individual or group occupational objectives, whether leading to specific kinds of farming or nonfarm agricultural occupations; and

- d. Use appropriate off-campus centers for providing pre-occupational experiences, such as the farm, for students planning to farm and the agricultural business or agency for those planning nonfarm agricultural occupations.
2. The capacity of the high school to provide for individual differences in occupational objectives of boys enrolled in vocational agriculture, depends on the extent to which it can organize to attain more than one level of accomplishment, namely:
 - a. Provide for students desiring to farm;
 - b. Provide for students desiring to enter nonfarm agricultural jobs; and
 - c. Provide for students desiring to enter an agricultural profession.
3. The high school with a vocational agriculture program must evaluate teaching material in the light of new demands being made upon it by a changing agriculture. Programs can no longer serve as terminal, limiting training to the primitive concept of "less than college" grade or non-college preparatory.

Careers in agriculture, even those in production, are being upgraded, requiring more preparation, including junior and senior college levels. Occupations in nonfarm agriculture at the Technical level require post high school training, while all professional careers involve a college education and beyond.

4. In organizing vocational agriculture to make it possible to meet the individual needs of boys who participate in its offerings, the resources of other vocational agencies in the school must be accessible.

Prospective workers in nonfarm agricultural concerns must often possess competencies in addition to those involving a knowledge and skill in agricultural subjects such as; financing, management, supervision, marketing, advertising, accounts, and buying.

Team teaching will insure continuity in the training program.

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APPENDIX

APPENDIX A

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer _____

Date of Interview _____

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in
Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form I

Firm Number _____ Occupational Family _____

I. Name of Business or Service _____

II. Address _____ Town _____

III. Person Interviewed _____

Position _____

IV. Estimated per cent gross income that is agriculturally oriented _____

V. Major agricultural products and/or functions of business or service

VI. Employees in this business or service (Total Number) _____

A. For employees needing competencies in agriculture, complete the
following:

<u>Existing Job Titles</u>	<u>Number of Employees</u>			
	<u>Presently</u>		<u>Five Years Hence</u>	
	<u>Full-Time</u>	<u>Part-Time</u>	<u>Full-Time</u>	<u>Part-Time</u>
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

Form I (cont'd)

<u>Existing Job Titles</u>	<u>Number of Employees</u>			
	<u>Presently</u>		<u>Five Years Hence</u>	
	<u>Full-Time</u>	<u>Part-Time</u>	<u>Full-Time</u>	<u>Part-Time</u>
5. _____	_____	_____	_____	_____
6. _____	_____	_____	_____	_____
7. _____	_____	_____	_____	_____
8. _____	_____	_____	_____	_____
B. Anticipated New Job Titles				
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

Fill out a separate Form II for each job title listed above.

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer _____

Date of Interview _____

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in
Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form II

Firm Number _____ Occupational Family _____ Level of Employment _____

I. Name and Address of Firm _____

II. Job Title _____

III. Number of workers in this Job Title

Full-Time _____ Part-Time _____

IV. Anticipated Number of workers Five Years Hence

Full-Time _____ Part-Time _____

V. Average Age _____ Minimum for Entry _____ Maximum for Entry _____

VI. Wages or Salary Per Month: (Beginning - Maximum - Present)

1. _____ 150-200 4. _____ 301-350 7. _____ 451-500 10. _____ 601-650

2. _____ 201-250 5. _____ 351-400 8. _____ 501-550 11. _____ 651-700

3. _____ 251-300 6. _____ 401-450 9. _____ 551-600 12. _____ 700 and above

VII. Activities and Duties of Persons with this Job Title (Detail)

VIII. Agricultural competencies with which worker must be familiar to do job

A. Area: Animal Science

<u>Nec- essary</u>	<u>Desir- able</u>	<u>Not Nec- essary</u>	
_____	_____	_____	1. Breeding Farm Animals
_____	_____	_____	2. Livestock Feeding and Nutrition
_____	_____	_____	3. Sanitation, Disease and Parasite Control
_____	_____	_____	4. Housing and Equipment
_____	_____	_____	5. Management
_____	_____	_____	6. The Dairy Manufacturing Industry
_____	_____	_____	7. Processing
			_____ Packing Plants
			_____ Creameries
			_____ Poultry Processing
			_____ Butchering
_____	_____	_____	8. Marketing
			_____ Packing Plants
			_____ Creameries
			_____ Poultry Processing Plants
			_____ Livestock Auctions

B. Area: Plant Science

_____	_____	_____	9. Propagation
_____	_____	_____	10. Soils and Fertilization
_____	_____	_____	11. Control of Insects _____ Diseases _____ Weeds _____
_____	_____	_____	12. Management
_____	_____	_____	13. Production of Ornamental Plants
_____	_____	_____	14. Landscaping
_____	_____	_____	15. Ginning
_____	_____	_____	16. Warehousing

B. Area: Plant Science (cont'd)

<u>Nec- essary</u>	<u>Desir- able</u>	<u>Not Nec- essary</u>	
_____	_____	_____	17. Processing (food, seed, grain, etc.)
_____	_____	_____	18. Marketing
_____	_____	_____	19. Forestry
			_____ Establishing a Stand
			_____ Hardwood Control
			_____ Fire Control
			_____ Estimating and Grading
			_____ Disease Control
			_____ Insect Control
			_____ Harvesting
			_____ Marketing
			_____ Manufacturing
			_____ Pulp Wood

C. Area: Agricultural Business Management and Marketing

_____	_____	_____	20. Records and Accounts, Budgeting and Analysis
_____	_____	_____	21. Agricultural Financing, Credit and Insurance
_____	_____	_____	22. Farm Organization and Management
_____	_____	_____	23. Labor Management
_____	_____	_____	24. Marketing Problems and Practices
_____	_____	_____	25. Agricultural Policy
_____	_____	_____	26. Agricultural and Related Price Analysis
_____	_____	_____	27. Cooperatives and Business Organizations

D. Area: Agricultural Mechanics and Automation

_____	_____	_____	28. Farm Power and Machinery
_____	_____	_____	29. Farm Buildings and Conveniences
_____	_____	_____	30. Farm Electrification and Processing
_____	_____	_____	31. Soil and Water Conservation

D. Area: Agricultural Mechanics and Automation (cont'd)

<u>Nec- essary</u>	<u>Desir- able</u>	<u>Not Nec- essary</u>
------------------------	------------------------	----------------------------

_____	_____	_____ 32. Farm Shop (welding, plumbing, etc.)
-------	-------	---

_____	_____	_____ 33. Farm Construction and Maintenance
-------	-------	---

E. Other Agricultural competencies that are needed for this Job Title _____

IX. Educational Level Desired for Job Titles (Check only one)

- _____ 1. Less than High School Graduate
- _____ 2. High School Graduate
- _____ 3. Post High School Technical Education
- _____ 4. Some College
- _____ 5. College Degree (Baccalaureate)
- _____ 6. Master's Degree
- _____ 7. Doctor's Degree
- _____ 8. No Preference

X. Residential Background (Check only one)

- _____ 1. Farm
- _____ 2. Rural, nonfarm
- _____ 3. Urban
- _____ 4. No Preference

XI. Farm Experience

- _____ 1. On a commercial farm
- _____ 2. On a noncommercial farm
- _____ 3. No Preference

XII. Experience Desired to Enter this Job Title _____

XIII. Limitations on Entering this Job Title

A. Licensing or Certification

_____ 1. Professional

_____ 2. Industrial

_____ 3. Civil Service

B. Labor Law Restrictions _____

C. Labor Union Restrictions _____

D. Other (specify) _____

XIV. Education Required to Advance in this Job Title

A. Technical short course or training provided by:

_____ 1. Your firm or the industry as a whole

_____ 2. On-the-job training

_____ 3. Public school (adult education)

_____ 4. A vocational school

_____ 5. An agricultural college

_____ 6. None

APPENDIX B

Following is a list of towns in Area I which were surveyed.

Plain Dealing
Springhill
Haynesville
Homer
Arcadia
Winnfield
Colfax
Many
Logansport
Mansfield
Natchitoches
Minden
Ringgold

Following is a list of firms and/or industries in Area I which were surveyed.

Poland Truck and Tractor Co., Arcadia
Arcadia Lumber Co., Arcadia
Federal Land Bank of Arcadia, Arcadia
Agricultural Stabilization and Conservation, Arcadia
C. R. Knotts, Poles & Piling Co., Saline
Corbett's Green House, Saline
Bienville Agricultural Extension Service, Arcadia
Haughton High School, Haughton
Johnson Lumber Co., Plain Dealing
S. H. Balinger Co. Limited, Plain Dealing
Wardview Gin Co., Inc., Plain Dealing
Gleason-Snyders Ford Co., Plain Dealing
Dixie Seed Inc., Gilliam
Al Wychie Distributor, Plain Dealing
Plain Dealing Builders Supply, Plain Dealing
Roberson Farm Equipment, Plain Dealing
North La. Chemical, Inc., Gilliam
Caldwell Motor Co., Plain Dealing
Vivian Furniture Co., Vivian
Galloway Grocery, Ida
Oil City Ford Motor Co., Oil City
Hall's Insurance Agency, Vivian
Cowgill's Sales, Vivian
Dominick Bros. Gin, Mira
Wilson Bros. Country Store, Vivian
Caddo Trust and Savings Bank, Gilliam
North Caddo Insurance Agency, Gilliam
Smith Motor Co., Vivian
Williamson's Chevrolet Co., Vivian
Vivian Bait Shop and Fish Market, Vivian
Vivian Oil & Gas, Vivian
Noah Tyson Water Well Drilling Service, Rodessa
Wayne's Phillips 66 Service Station, Vivian
Woodard-Walker Lumber Co., Taylor
Amos Smith Farm Service, Gibbsland
McGehee Poultry Inc., Arcadia
Kimball's & Murphy General Store, Haynesville
Piggly Wiggly, Haynesville
Waller Ford Co., Haynesville
Martin Gro. & Market, Haynesville
Lowe & Kilpatrick Esso, Haynesville
Sales Bros. General Store, Haynesville
Camden Monument Works, Haynesville
Reeder Log Co., Haynesville
Haynesville Cotton Warehouse Co., Haynesville
North La. Post Plant, Haynesville
Planter's Bank & Trust Co., Haynesville
Ritchie Gro. Co., Haynesville
Parker's Dairy, Haynesville
Blackwell Feed & Seed Store, Haynesville
Arcadia Production Credit, Arcadia

Haynesville Locker Plant, Haynesville
 C. T. Almond Dist, Haynesville
 Haynesville Chevrolet Co., Haynesville
 Arkansas & Louisiana Lumber Co., Haynesville
 L. D. Carter & Son Timber Co., Haynesville
 P. D. Holt Gro. & Market, Haynesville
 Claiborne Merc. Timber & Land Co., Haynesville
 Brunson Wood Co., Haynesville
 The People's Cotton Warehouse, Homer
 Piggly Wiggly, Homer
 Moore's Feed Store, Homer
 Torbert Feed & Seed Store, Homer
 H. F. Pate Freezer & Meat Processing Plant, Athens
 Homer Drug Co, Homer
 Claiborne Drug, Homer
 Lee's Drugs, Homer
 Hollis Farm Supply, Homer
 L. M. Owens Garage & Machine Shop, Homer
 Roy Owens Welding Service, Homer
 Claiborne Parish Agricultural Extension, Homer
 Pugh Lime Service, Homer
 Claiborne Parish Farm Bureau, Homer
 Junction City Wood Yard, Homer
 Harmon & Crane Wood Contractors Inc., Homer
 Claiborne Electric Cooperative, Homer
 Claiborne Wholesale Co., Homer
 Claiborne Parish ASCS, Homer
 Caney Ranger District, U. S. Forest Service, Homer
 Soil Conservation Service, Homer Work Unit, Homer
 F.H.A. County Office, Homer
 Boatner Gro. & Market, Arcadia
 Lyles Auction, Mansfield
 Rhet Grant, Auctioneer, Mansfield
 Farm Bureau Insurance, Mansfield
 Pineland Chain Saw, Mansfield
 Pelican Locker Plant, Pelican
 Thigpen Packing Co., Mansfield
 McLaurin's Super Market, Mansfield
 Ruffin Super Market, Mansfield
 Francis Ruffin's Super Market, Mansfield
 Wag-A-Bag Grocery, Mansfield
 Piggly Wiggly, Mansfield
 First National Bank, Mansfield
 Mansfield Bank & Trust Co., Mansfield
 Mathews Lumber Co., Mansfield
 Soil Conservation District, Mansfield
 DeSota Agricultural Extension Service, Mansfield
 ASCS, Mansfield
 Vocational Agricultural Instructor, Stonewall
 Louisiana Animal Breeders Co-op. Grand Cane
 D.H.I.A. Supervisor, Stonewall
 Mansfield Meat Co., Mansfield

Billy Pollock-Midwest Dairy, Mansfield
 Farmers Supply Co., Mansfield
 A. Frank Jackson Co., Mansfield
 Middleton Feed Supply, Mansfield
 Cowans Merchantile, Stonewall
 Murray Smith Farm Supply, Mansfield
 Logansport Locker Plant, Logansport
 Piggly Wiggly, Logansport
 Stanley Locker Plant, Logansport
 McBride Feed and Seed Store, Logansport
 Rite-Care Poultry Co., Logansport
 Wallir Hatchery, Logansport
 N. J. Caraway Co. Department Store, Logansport
 John Henry Black, Logansport
 Cen-Tex Hatchery Co., Logansport
 James A. Pace Lumber Co., Logansport
 Pace Hardware & Furniture Co., Logansport
 McGuire's Garage, Montgomery, La.
 Lang Motor Co., Montgomery
 Harrison Grocery, Montgomery
 Montgomery Furniture & Hardware, Montgomery
 Kilpatrick's General Merchandise, Montgomery
 Bank of Montgomery, Montgomery
 Montgomery Block Co., Montgomery
 Everette Nelms Supplies and Feed & Seed, Montgomery
 W. P. Williams Insurance Agency, Colfax
 Kuhlmann Ford, Inc., Montgomery
 Fletcher's Hardware and Furniture Co., Montgomery
 Milam's Department Store, Montgomery
 Futrell Motor Co., Colfax
 Murler Motor Co., Colfax
 Colfax Lumber Co., Colfax
 Valley Electric Membership Co-op., Natchitoches
 Natchitoches Lumber Yard, Inc., Natchitoches
 Cane River Supply Co. Inc., Natchitoches
 Agricultural Stabilization and Conservation Service, Natchitoches
 U.S.D.A. Plant Pest Control, Natchitoches
 La., Department of Agriculture Division of Entomology, Natchitoches
 Chambers Nursery, Natchitoches
 Natchitoches Nursery, Natchitoches
 Foshier Dusting Co., Natchitoches
 La. Forestry Commission, Natchitoches
 Acme Cement Co., Natchitoches
 Aaron Ford Tractor, Natchitoches
 SCS, USDA, Natchitoches
 U. S. Forest Service, Natchitoches
 Hunt's Food and Industry, Inc., Natchitoches
 Natchitoches Seed Store Inc., Natchitoches
 Marthaville Milling Co., Marthaville
 Natchitoches Parish Farm Bureau, Natchitoches
 Russell & Salim Crop Duster, Natchitoches
 Thompson Hayworth Chemical Co., Natchitoches

Natchitoches Soybean Co., Natchitoches
 Valley Farmers Co-op. Inc., Natchitoches
 West La. Farmers Assn., Many
 Rogers Enterprises, DeRidder
 Florian Mercantile Co., Florian
 United Auto Parts, Many
 Sammy Wall Logging Contractor, Many
 Tabors Farm Supply, Many
 Young's Cash Store, Florian
 Greer's Grocery & Market, Zwolle
 Zwolle School Community Food Pres Center, Zwolle
 L. Lefkouits & Co., Zwolle
 Zwolle Feed Store, Zwolle
 Paul Ebarb & Co., Zwolle
 Vickers Grocery, Zwolle
 Many Motor Co., Many
 Sibley's Market, Zwolle
 Sabine Lumber Co., Zwolle
 J. Wallace Settle Concrete Products, Minden
 Sam Jones, Inc., Minden
 Webster Parish Cooperative Ext. Service, Minden
 Agricultural Stabilization & Conservation, Minden
 The Pardee Co., Minden
 Minden Chamber of Commerce, Minden
 Anti-Pest and Veitch Termite Control, Minden
 Sauacool Concrete Works, Minden
 C. E. Valentine Farm Produce, Minden
 Carraway Feed & Hardware Store, Sarepta
 La. Wildlife & Fisheries Comm., Minden
 Bayou Industrial Corporation, ;Minden
 The Blosson Shop, Minden
 Bolen Speede Ford Inc., Minden
 Sanitary Dairy Products, Minden
 Dunham Manufacturing Co., Minden
 Dealer Association Inc. , Minden
 Standard Chevrolet Co., Minden
 Williams & Hicks Co., Minden
 Webster Freezing & Storage Co., Minden
 Columbia Southern Plywood Corp., Minden
 Robinson Nursery, Minden
 Webster Parish Farm Bureau, Minden
 Cone Farm Products, Minden
 Cone & Johnson Feed Store, Minden
 Helfin Freezer Locker Plant, Helfin
 District 4, La. Forestry Commission, Minden
 Woodard-Walker Sawmill Co., Helfin
 Continental Can Co., Winnfield
 Tremont Lumber Co., Joyce
 American Cresote Works, Winnfield
 L. L. Brewton Lumber Co., Winnfield
 Watt's Gin Co., Winnfield
 Soil Conservation Service, Winnfield

Aaron Ford Tractor Co., Inc., Winnfield
CCC Super Market & Slaughter House, Winnfield
Riley's Gro. & Slaughter House, Winnfield
Terminix Pest Control, Winnfield
Winnfield Veneer Co., Winnfield
A & P Store, Winnfield
Hunt Lumber Co., Dodson
U. S. Forest Service, Winnfield
Agricultural Stabilization & Conservation Service, Winnfield
Olin Mathieson, Winnfield
Ruston Oil Meal & Fert. Co., Arcadia
Olin Mathieson Chemical Corp., Arcadia
Crump Tractor Co., Haynesville
Santiam Southern Co., Haynesville
Haynesville Planning Mill, Haynesville
Allen Bros. Feed Mill of Home, Inc., Homer
Marvel Box Co., Homer
Homer Livestock Auction, Homer
Goodwin Welding Service, Inc., Haynesville
Power Tool Center, Haynesville
Claiborne Butane, Homer
Lowry Packing Co., Minden

APPENDIX C

The following is a list of the job titles in each of the eight non-farm agricultural occupational families, including the number of workers found in each job title.

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Machinery Sales & Service	Professional	
	Research Engineer	4
	Plant Research Engineer	1
	Field Research Engineer	1
	Asst. Plant Research Engineer	4
	Asst. Field Research Engineer	4
	Plant Production Engineer	1
	Asst. Plant Produc. Engineer	3
	Research Draftsman	1
	Asst. Research Draftsman	3
	Total Professional.	.22
	Technical	
	Total Technical.	0
	Managerial	
	General Manager	1
	Sales Manager	3
	Parts Manager	6
	Service Manager	1
	Manager	7
	Asst. Manager	2
	Owner-Manager	4
	Warehouse Manager	1
	Manager-Salesman	1
	President-Manager	1
	Vice President Manager	1
	Co-Owner Manager	4
	Pres. Research Engineer	1
	Vice Pres. Sales Manager	4
	Asst. Sales Manager	1
	Total Managerial.	.38
	Supervisory	
	Shop Foreman	9
	Foreman-New Equipment	2
	Plant Production Foreman	2
	Asst. Plant Production Fore.	2
	Total Supervisory.	15

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Machinery Sales & Service	Sales	
	Salesman	80
	Parts Salesman	1
	Total Sales.	81
	Office	
	Bookkeeper	10
	Office Secretary	5
	Bookkeeper & Asst. Manager	2
	Total Office.	17
	Skilled	
	Mechanic	60
	Partsman	8
	Welder	16
	Asst. Partsman	1
	Machinist	4
	Bodyman	2
	Mechanic & Truck Driver	1
	Total Skilled.	92
	Semiskilled	
	Truck Driver	1
	Mechanic Helper	4
	Assemblyman	3
	Shop Worker	3
	Setup & Deliveryman	2
	Total Semiskilled.	13
	Unskilled	
	Common Laborer	2
	Total Unskilled.	2
Total Farm Machinery Sales and Service.		280
Farm Supplies & Equipment	Professional	
	Total Professional.	0
	Technical	
	Ammoniator	1
	Total Technical.	1
	Managerial	
	Manager	18
	Store Manager	5
	General Manager	2
	Service Manager	1
	Plant Manager	4
	Manager-Owner	11

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Supplies & Equipment (cont'd)	Managerial (cont'd)	
	Asst. Manager	14
	Department Manager	1
	Market Manager	4
	Warehouse Manager	4
	General Mgr.-Co-owner	6
	Asst. Mgr.-Bookkeeper	1
	Asst. Mgr.-Co-owner-Clerk	1
	Co-manager	5
	Owner-Operator	1
	President-Manager	1
	L. P. Gas Sales Manager	1
	Total Managerial.	.81
	Supervisory	
	Plant Superintendent	1
	Boiler Serviceman	2
	Feed Room & Mixer Foreman	1
	Total Supervisory.	4
	Sales	
	Salesman	17
	Sales Clerk	10
	Sales Lady	3
	Outside Salesman	1
	Farm Store Salesman	18
	Inside Salesman	5
	Store Clerk	1
	Gas Salesman	3
	Feed Buyer	6
	Total Sales.	64
	Office	
	Bookkeeper	9
	Shipping Clerk	2
	Office Employee	3
	Secretary	2
	Clerk	1
	Secretary & Bookkeeper	1
	Office Clerk	1
	Receiving & Shipping Clerk	1
	Assistant Bookkeeper	1
	Total Office.	.21
	Skilled	
	Mechanic	5
	Mechanic Serviceman	1
	Butcher	7
	Parts Man	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Supplies & Equipment (cont'd)	Skilled (cont'd)	
	Machinist	1
	Plumber (Farm)	2
	Carburetor Mechanic	1
	Pay Load Operator	2
	Total Skilled.	20
	Semiskilled	
	Truck Driver	26
	Warehouseman	10
	Service & Repairman	1
	Assistant Butcher	2
	Sack Hanger	1
	Sewing Machine Operator	1
	Feed Mixer	2
	Total Semiskilled.	43
	Unskilled	
	Porter	1
	Yardman	3
	Laborer	29
	Deliveryman	9
	Plant Helper	1
	Stock Boy	1
	Dock Workers	4
	Warehouse Assistant	2
	Total Unskilled.	50
Total Farm Supplies and Equipment.		284
Livestock & Poultry	Professional	
	Total Professional.	0
	Technical	
	Inspector-Grader	4
	Cattle Buyer	7
	Auctioneer	1
	Plant Engineer	1
	Total Technical.	13
	Managerial	
	Plant Manager	3
	Manager	25
	Assistant Manager	5
	Egg Department Manager	1
	Owner-Manager	15
	Assistant Plant Manager	1
	Office Manager	2
	Marketing Manager	2
	Produce Manager	6

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Livestock & Poultry (cont'd)	Managerial (cont'd)	
	Market Manager	2
	Grocery Manager	1
	Hatchery Manager	3
	President-Manager	1
	Owner-Livestock Buyer	1
	Yard Manager	1
	Asst. Manager & Salesman	1
	Stock Manager	1
	Farm Flock Manager	8
	Company Owner-Manager	4
	Total Managerial.	.83
	Supervisory	
	General Plant Superintendent	1
	Shipping Foreman	1
	Foreman	5
	Quality Control Supervisor	1
	Asst. Plant Superintendent	1
	Poultry Supervisor	1
	Meat Superintendent	1
	Hatchery Foreman	1
	Pullet Program Foreman	2
	Asst. Shipping Superintendent	1
	Mill Foreman	1
	Total Supervisory.	16
	Sales	
	Salesman	6
	Route Salesman	7
	Purchasing Agent	1
	Livestock Buyer	1
	Market Clerk	3
	Baby Chick Salesman	2
	Total Sales.	20
	Office	
	Bookkeeper	4
	Ticket Writer	6
	Secretary	2
	Receiving Clerk	1
	Clerk	2
	Weightmaster	1
	Accountant	1
	Bookkeeper-Clerk	1
	Check Writer	1
	Total Office.	.19

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Livestock & Poultry (cont'd)	Skilled	
	Meat Cutter	1
	Butcher	23
	Auctioneer	1
	Slaughter Butcher	3
	Butcher-Meat Cutter	3
	Electrician	1
	Milk Purification Operator	1
	Sausage Maker	1
	Total Skilled.	34
	Semiskilled	
	Maintenance Man	2
	Butcher's Helper	4
	Slaughterer	12
	Yardman	13
	Truck Driver	36
	Grader	5
	Mixers Man	1
	Laborer	15
	Produce Helper	4
	Meat Wrapper	14
	Stock Man	2
	Routeman's Helper	1
	Handyman	1
	Total Semiskilled.	110
Total Livestock and Poultry.		295
Crops, Forestry & Soil Conservation	Professional	
	Forester III	1
	District Ranger	6
	Forester II	2
	Unit Forester	2
	Asst. District Forester	1
	District Forester	1
	Forester	34
	Chief Forester	3
	Area Forester	1
	Asst. District Ranger	1
	Forest Chemist	1
	Total Professional.	53
	Technical	
	Investigator III	1
	Forest Technician	4
	Engineer	1
	Enforcement Agent	1
	Engineer's Aid	2

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Crops, Forestry & Soil Conservation (cont'd)	Technical (cont'd)	
	Practical Forester	5
	Forestry Aid	10
	Total Technical.	24
	Managerial	
	Assistant Manager	1
	President	1
	Gin Manager	4
	Land Manager	1
	Manager	12
	Office Manager	3
	Vice President	1
	General Manager	1
	Plant Manager	3
	Sales Manager	3
	Owner-Manager	6
	President-Co-owner	1
	President- General Manager	1
	Company Manager & Co-owner	3
	Manager-Operator	1
	Insurance Manager	1
	Manager-President	1
	Asst. Sales Manager	1
	Total Managerial.	45
	Supervisory	
	Foreman	2
	Asst. Superintendent	2
	Quality Control Supt.	1
	Wood Yard Foreman	4
	Mill Superintendent	7
	Maintenance	1
	Yard Foreman	2
	Superintendent	2
	Production Plant Supt.	12
	Gin Superintendent	1
	Plant Superintendent	1
	Repair Shop Foreman	2
	Logging Foreman	2
	Compress Labor Foreman	2
	Woods Foreman	12
	Mill Foreman	7
	Planner Mill Foreman	9
	Asst. Woods Foreman & Truck Driver	1
	Construction & Maint. Supt.	1
	Gen. Foreman of Roads and Grounds	1
	Dry Kiln Foreman	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Crops, Forestry & Soil Conservation (cont'd)	Supervisory (cont'd)	
	Shipping Foreman	1
	Pulpwood Superintendent	1
	Green End Foreman	1
	Logging Superintendent	1
	Total Supervisory.	77
	Sales	
	Salesman	1
	Timber Buyer	4
	Pole Buyer	2
	Total Sales.	.7
	Office	
	Clerks	3
	Shipping Clerk	6
	Typist-Clerk	9
	Secretary	1
	Bookkeeper	3
	Admin. Officer	1
	Accountant	1
	Invoice Clerk	1
	Total Office.	.25
	Skilled	
	Forest Ranger I	1
	Forest Ranger II	3
	Forest Ranger III	1
	Heavy Equipment Operator	36
	Partsman	1
	Ginner	2
	Press Operator	2
	Trimmer	68
	Mechanic	15
	Gin Operator	4
	Standman	2
	Radio Operator	1
	Welder	1
	Lookout Man	2
	Electrician	1
	Edgeman	11
	Millwright	6
	Sawyer	17
	Cutup man	1
	Loader Operator & Wood Scaler	1
	Loader Operator	1
	Saw Filer	13
	Lumber Grader	23
	Lumber Checker	3

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Crops, Forestry & Soil Conservation (cont'd)	Skilled (cont'd)	
	Planner Machine Operator and Mechanic	3
	Timber Marker Estimator	11
	Grain Inspector	1
	Dry Kiln Operator	2
	Power Saw Operator	102
	Log Skidder	2
	Towmotor Operator	2
	Millwright & Sawyer	1
	Lumber Setter	3
	Plywood Grader	6
	Crane Operator	1
	Machinist	2
	Welder Mechanic	3
	Total Skilled.	.355
	Semiskilled	
	Forest Foreman I	11
	Forest Foreman II	12
	Forest Foreman III	14
	Tractor Operator	88
	Forest Fireman	37
	Maintenance Helper	3
	Log Scaler	14
	Gin Stand Worker	2
	Truck Driver	115
	Forest Towerman I	9
	Forest Towerman II	5
	Forest Towerman III	17
	Tree Trimmer	38
	Crawler Driver	16
	Pole & Pile Peeler	5
	Scaler Helper	1
	Mechanic Helper	2
	Saw Filer Helper	1
	Log Lifter	7
	Debarker Operator	4
	Chipper Operator	2
	Lumber Handler	1
	Forester Aid	34
	Tractor Driver & Loader	2
	T.S.I. Crewman	20
	Road Maintenance Crew	
	Laborer	4
	Fork Lift Operator	1
	Total Semiskilled.	.465

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont'd)	Unskilled	
	Yardman	2
	Laborer	178
	Suction Feeder	2
	Yard Laborer	4
	Feed Mill & Grain	
	Elevator Worker	2
	Cotton Loader	8
	Total Unskilled.	196
	Total Crops, Forestry and Soil Conservation.	1,247
Ornamental Horticulture	Professional	
	Total Professional.	0
	Technical	
	Total Technical.	0
	Managerial	
	Nursery Manager	1
	Assistant Manager	1
	Owner-Manager	4
	Co-Manager & Owner	2
	Total Managerial.	8
	Supervisory	
	Total Supervisory.	0
	Sales	
	Total Sales.	0
	Office	
	Total Office.	0
	Skilled	
	Total Skilled.	0
	Semiskilled	
	Total Semiskilled.	0
	Unskilled	
	Laborer	6
	Nursery Helper	3
	Total Unskilled.	9
	Total Ornamental Horticulture.	17

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Wildlife & Recreation	Professional	
	Wildlife Biologist	3
	Fish Biologist	1
	Total Professional.	.4
	Technical	
	Waste Disposal Inspector	1
	Total Technical.	1
	Managerial	
	Owner-Manager	1
	Asst. Manager & Salesman	1
	Total Managerial.	.2
	Supervisory	
	Refuge Supervisor	3
	Total Supervisory.	3
	Sales	
	Total Sales.	0
	Office	
	Total Office.	.0
	Skilled	
	Total Skilled.	0
	Semiskilled	
	Total Semiskilled.	0
	Unskilled	
	Laborer	1
	Total Unskilled.	1
Total Wildlife and Recreation.		11
Farm Service	Professional	
	Home Economist	1
	Appraiser	1
	Entomologist	1
	Total Professional.	.3
	Technical	
	Pest Control Technician	4
	Milk Technician	1
	Livestock Board Inspector	3
	Artificial Inseminator	1
	Pilot	3

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Service (cont'd)	Technical (cont'd)	
	Radio Breaker & Utility Maint. Man	1
	Meter & Utility Maint. Man	1
	Total Technical.	14
	Managerial	
	Manager	5
	Asst. Manager	4
	Sales Manager	1
	Branch Manager	1
	Vice President	4
	President	1
	General Manager	1
	Office Manager	1
	Owner-Manager	6
	Credit Manager	2
	Manager-Welder	1
	Treas. Office Manager	1
	Co-Manager	2
	Asst. Manager Accountant	1
	Manager & Insurance Agent	1
	Engineer Manager	1
	Agency Manager	1
	Total Managerial.	34
	Supervisory	
	Line Superintendent	4
	Service Supervisor	1
	Fieldman	3
	Right-of-way Foreman	2
	Supervisor of Meter Readers	1
	Total Supervisory.	11
	Sales	
	Salesman	4
	Insurance Salesman	1
	Service Agent	4
	Power Use Manager & Public Relations Man	3
	Total Sales.	12
	Office	
	Secretary	4
	Bookkeeper	2
	Clerk	1
	Clerical Asst.	4
	Office Secretary	1
	Stock Clerk	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Farm Service (cont'd)	Office (cont'd)	
	Treasurer	1
	Asst. Cashier	2
	Cashier	4
	Steno-Clerk	1
	Accountant II, Transp. Clerk	1
	Work Order Clerk	1
	Warehouse Clerk	1
	Accountant I	1
	Accountant III-Billing Clerk	1
	Asst. Bookkeeper	1
	Secretary Bookkeeper	1
	Dispatcher	1
	Claims Adjuster	1
	Total Office.	30
	Skilled	
	Mechanic	5
	Lineman	18
	Welder	3
	Cement Batch Operator	1
	Heavy Equipment Operator	1
	Total Skilled.	28
	Semiskilled	
	Warehouseman	1
	Ground Crew	21
	Asst. Exterminator	3
	Caretaker	2
	Welder's Helper	11
	Tree Pruner	8
	Meter Reader	10
	Total Semiskilled.	56
	Unskilled	
	Laborer	8
	General Helper	17
	Service Assistant	8
	Total Unskilled.	33
Total Farm Service.		221
Agricultural Service	Professional	
	Voc. Agriculture Teacher	2
	Asst. County Agent	2
	Forester	1
	Home Demonstration Agent	2
	County Agent	4
	State Entomologist	1
	Assoc. County Agent	4

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Agricultural Service (cont'd)	Professional (cont'd)	
	Asst. Home Demonstration Agent	2
	Soil Conservationist	2
	Work Unit Conservationist	3
	Assoc. Home Demon. Agent	3
	Total Professional.	.26
	Technical	
	Soil Conservation Technician	1
	Conservation Technician	2
	Engineering Aid	3
	Total Technical.	6
	Managerial	
	President	2
	Manager	1
	Office Manager	4
	County Office Manager	2
	Exec. Vice President	1
	Total Managerial.	.10
	Supervisory	
	Performance Supervisor	2
	County Supervisor	1
	Plant & Insect Inspector	2
	Total Supervisory.	.5
	Sales	
	Total Sales.	.0
	Office	
	Secretary	7
	Program Clerk	4
	Counter Clerk	2
	Administrative Clerk	2
	Clerk	4
	Chief Clerk	1
	County Office Clerk	1
	Agri. Conser. Program Clerk	3
	General Clerk	4
	Performance Clerk	2
	Total Office.	.30
	Skilled	
	Field Reporter	15
	Total Skilled.	15

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS

Agricultural Service (cont'd)	Semiskilled	
	District Aid	3
	Pest Control Assistant	1
	Total Semiskilled.	4
	Unskilled	
	Total Unskilled.	0
Total Agricultural Service.		.96